

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of the claims in the application:

Listing of Claims:

Claims 1- 3 (Canceled)

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SUB C Claim ~~4~~ (Currently Amended): The [telephone] communication line protection module
of ~~Claim 6~~ Claim ¹2, wherein said spring member is soldered to a heat transfer member which
urges said conductive member toward one said tip or ring conductor, and wherein said spring
member is released from said heat transfer member after said solder melts to contact one said tip
or ring conductor to thereby short circuit said tip or ring conductor to ground.

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B Claim ~~5~~ (Currently Amended): The [telephone] communication line protection module
of ~~Claim 6~~ Claim ¹1, further including a third overvoltage sensitive device, and a heat transfer
member soldered to said spring member, said third overvoltage sensitive device positioned
between said heat transfer member and said conductive member.

Claim ¹~~6~~ (Currently Amended): A communication line protection module providing overvoltage and failsafe protection, comprising:

a tip conductor, a ring conductor and a ground conductor;

5 a spring member connected to said ground conductor, said spring member adapted for movement into contact with at least one of said tip or ring conductors for shorting at least one said tip or ring conductor to ground;

a conductive member biased by said spring member toward said tip or ring conductor;

and

10 a first and second overvoltage sensitive device. The telephone line protection module of Claim 1, further including two said overvoltage sensitive devices, each said overvoltage sensitive device being sandwiched between said conductive member and a respective said tip conductor or ring conductor, such that the first and second overvoltage sensitive devices are in electrical contact with said conductive member and a respective said tip conductor or ring conductor.

Claim ⁴~~7~~ (Currently Amended): The [telephone] communication line protection module of Claim ¹~~6~~, wherein said conductive member is mounted for movement toward said tip and ring conductors by said spring when said overvoltage sensitive device is damaged due to thermal energy.

Claim ⁵~~8~~ (Currently Amended): The [telephone] communication line protection module of Claim ¹~~6~~ Claim 1, further including three said overvoltage sensitive devices, each bonded with an electrically conductive bonding material to said conductive member.

☒ Claim 9 (Canceled)

Claim ⁶~~10~~ (Currently Amended): The [telephone] communication line protection module of Claim ¹~~6~~ Claim 1, further including a heat transfer member soldered to said spring member, and wherein said heat transfer member is in direct thermal contact with said conductive member.

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Claim ⁷~~11~~ (Currently Amended): The [telephone] communication line protection module of Claim 6 ~~Claim 1~~, wherein said overvoltage sensitive ~~device is~~ devices are positioned directly between said conductive member and ~~one~~ a respective said tip or ring conductor so that if a portion of either said overvoltage sensitive device melts, said conductive member moves toward an associated said ~~one~~ tip or ring conductor.

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Claim ⁸~~12~~ (Currently Amended): The [telephone] communication line protection module of Claim 6 ~~Claim 1~~, wherein said tip and ring conductors define telephone line tip and ring conductors, and further including an equipment side tip and ring conductor, and further including a first and second overcurrent protection device, said first overcurrent protection device being connected between said telephone line tip conductor and said equipment side tip conductor, and said second overcurrent protection device being connected between said telephone line ring conductor and said equipment side ring conductor.

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Claim ~~13~~ (Currently Amended): A [telephone] communication line protection module providing [telephone] communication line overvoltage and failsafe protection, comprising:
a base supporting at least a ground conductor, a tip conductor and a ring conductor;

5 a conductive spring member electrically connected to said ground conductor of said module, said spring member adapted for engaging said tip and ring conductors to short circuit said tip and ring conductors together and to ground;

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10 a heat transfer member bonded to said spring member with a heat sensitive material so as to become unbonded from said spring member in response to thermal energy transferred to the heat sensitive material via said heat transfer member;

a conductive member to which two or more overvoltage sensitive devices are mounted, said conductive member being biased toward said tip and ring conductors by said spring member via said heat transfer member; and

15 said spring member being maintained in a first position such that said spring member is not in electrical contact with said tip and ring conductors when said heat transfer member remains bonded to said spring member, and said spring member is biased to move to a second position when thermal energy generated by said overvoltage sensitive devices causes said heat transfer member to become unbonded from said spring member, thereby allowing a portion of said spring member to move and engage said tip and ring conductors.

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Claim ~~14~~ (Currently Amended): The [telephone] communication line protection module of Claim ~~13~~, wherein three overvoltage sensitive devices are mounted to said conductive member to provide a balanced electrical circuit between said tip, ring and ground conductors.

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Claim ~~15~~ (Currently Amended): The [telephone] communication line protection module of Claim ~~13~~, wherein said conductive member is assembled so as to include one said overvoltage sensitive device on one side thereof, and a pair of other said overvoltage sensitive devices on an opposite side of said conductive member.

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Claim ~~16~~¹² (Currently Amended): The [telephone] communication line protection module of Claim ~~15~~¹¹, wherein each overvoltage sensitive device of said pair of overvoltage sensitive devices engages a conductive tower strip connected to a respective said tip and ring conductor, and said third overvoltage sensitive device engages said heat transfer member.

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Claim ~~17~~¹³ (Currently Amended): The [telephone] communication line protection module of Claim ~~15~~⁹, further including a protective cover removably fastened to said base, and opposing inside surfaces of said protective cover restrict axial movement of said conductive member.

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Claim ~~18~~¹⁴ (Currently Amended): The [telephone] communication line protection module of Claim ~~15~~⁹, wherein each overvoltage sensitive device is soldered only to said conductive member.

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Claim ~~19~~¹⁵ (Currently Amended): The [telephone] communication line protection module of Claim ~~15~~⁹, wherein said conductive member and said overvoltage sensitive devices attached thereto define an assembly that is insertable between said spring member and said tip and ring conductors.

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Claim ~~20~~¹⁶ (Currently Amended): The [telephone] communication line protection module of Claim ~~15~~⁹, further including three said overvoltage sensitive devices, and wherein two said overvoltage sensitive devices have substantially identical electrical characteristics, and a third said overvoltage sensitive device has different electrical characteristics than said two overvoltage sensitive devices.

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Claim ~~21~~¹⁷ (Currently Amended): The [telephone] communication line protection module of Claim ~~15~~⁹, further including three said overvoltage sensitive devices, each electrically fixed to said conductive member.

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Claim ~~22~~¹⁸ (Currently Amended): The [telephone] communication line protection module of Claim ~~13~~⁹, further including a first and second elongate conductor strip connected directly to respective module pins associated with customer equipment, and a third and fourth elongate conductor strip connected directly to respective module pins associated with a telephone line, and further including a first current limiting device sandwiched between said first and third conductor strips, and a second current limiting device sandwiched between the second and fourth conductor strips.

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Claim ~~23~~¹⁹ (Currently Amended): The [telephone] communication line protection module of Claim ~~13~~⁹, further including a housing adapted for attaching to said base, and wherein said housing has formed on an inner surface thereof webs for maintaining registration of components mounted to said base.

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Claim ~~24~~²⁰ (Currently Amended): The [telephone] communication line protection module of Claim ~~22~~¹⁸, further including a half ringer circuit connected between said third and fourth conductor strips.

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Claim ~~25~~²¹ (Currently Amended): The [telephone] communication line protection module of Claim ~~13~~⁹, further including first and second elongate conductor strips associated with customer equipment, and third and fourth elongate conductor strips associated with a [telephone] communication line, and further including a mechanism held in compression between said first and third conductor strips and between said second and fourth conductor strips, said mechanism being wired so as to provide a reversal of said [telephone] communication line.

Claim ²²~~26~~ (Currently Amended): A [telephone] communication line protection module, comprising:

a plurality of pins, a first and second of which are associated with customer equipment circuits, and a third and fourth pin which are associated with [telephone] communication line circuits, and further including a fifth pin associated with ground;

a base for supporting said pins in a predefined configuration;

a first and second elongate conductor strip, each fixed to a respective first and second pin associated with the customer equipment;

a third and fourth elongate conductor strip, each fixed to a respective third and fourth pin associated with the [telephone] communication line circuits;

a conductive member to which three overvoltage sensitive semiconductor devices are mounted, a first and second said semiconductor devices being engageable respectively with said third and fourth elongate conductor strips;

a conductive spring member connected to said fifth pin, said conductive spring member having a pair of arms adapted for short circuiting together said third and fourth elongate conductor strips when said conductive spring member moves toward a relaxed position; and

a heat conductive member soldered to said conductive spring member in a position such that said heat conductive member is spring biased against said third semiconductor device, whereby when said third semiconductor device generates sufficient thermal energy to melt the solder, a portion of said conductive spring member arms move and cause short circuiting of said third and fourth elongate conductor strips.

Claim ²³~~27~~ (Currently Amended): The [telephone] communication line protection module of Claim ²²~~26~~, further including a housing having internal webs for providing registration stops for components attached to said base.

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Amdt. dated May 6, 2004
Reply to Office Action of Feb. 6, 2004

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Claim ²⁴~~28~~ (Currently Amended): The [telephone] communication line protection module
of Claim ²²~~26~~, wherein said third and fourth elongate conductor strips have at ends thereof a
respective test point accessible via holes in a housing snap fit to said base.
